

MINIMUM SPECIFICATIONS FOR A DIESEL HEATED TRAILER MOUNTED ASPHALT MAINTAINER/POTHOLE PATCHER

1.0 General: The trailer mounted 4 ton Asphalt Maintainer/Pothole patching unit and shall be new current production model year and meet the minimum requirements contained herein.

1.1 Purpose: The patching unit will be able to safely maintain Hot Mix asphalt for use in pothole patching. The machine must be Diesel heated and capable of maintaining asphalt for a period of 48 hours. Complete operation manual and parts list must be furnished with the unit. A factory-trained person will be available for initial start up and training.

1.2 Approved Equal: The act that the manufacture chooses not to produce equipment to meet these specifications will not be considered cause to adjust these specifications or purchases of items as restrictive. To be considered an approved equal the equipment must be demonstrated to the purchasing party prior to the bid letting and be approved.

1.3 Bid Proposal: The bidder's proposal shall be submitted on the forms provided in this request for bid. Failure of the bidder to complete the attached bid form and questionnaire may be grounds for rejections of the bidder's proposal. All exceptions to the minimum specifications shall be noted on a separate piece of paper and attached to the bid form. Bid Questionnaire must be completely filled out. Bidder must also furnish with their bid full detailed literature and factory specifications of the unit being offered, but not as a substitution to the questionnaire.

1.4 Bidder Qualifications: No Bid will be considered unless the bidder can meet the following conditions:

- A. That it has in operation a fully authorized distributor for parts/service and is located within 300 miles of the equipments final destination.
- B. That the equipment being bid is current production and meets the needs of the specifications without modifications. The model must be currently advertised, have been in productions for a minimum of one year and having a working volume of not less than called for in this specifications. Hybrid, one-off or prototype equipment is unacceptable.

- C. Bidders must show proof that they maintain a large inventory of parts at their facility for the model of equipment they are bidding.

2.0 Minimum Specifications:

2.1 Frame: The unit will be trailer mounted and capable of being towed at safe highway speeds when fully loaded. The frame is to be constructed of minimum 6"x 2"x 3/16" gusseted tubular steel for safety and strength. "C" channel type frames will not be allowed. A 2-1/2" towing ring that is adjustable in height from 15" to 30" will be provided. The frame shall include minimum 12 gauge flat horizontal surface steel fenders. A swing-away adjustable screw jack must be provided.

2.2 Running Gear: To reduce maintenance, lower the trailers centers of gravity for best towing stability and provide smooth ride, the unit will be equipped with a corrosion resistant Tandem independent rubber torsion axels. The tandem axel system shall be rated at a GAWR (Gross Axel Weight Rating) if 14,000 lbs. with electric brakes, emergency breakaway switch, 16" radial tires and 8 lug heavy duty white painted rims, and two 3/8" x 4 foot long safety chains with slip hooks. The unit shall come equipped with dual stop, tail, and turn lights. A lighted license plate bracket will be attached to the fender.

2.3 Hopper: The material hopper must be constructed of no less than 1/4" (.250) steel and reinforced for sufficient structural integrity. All walls will be a single piece construction. The capacity will be 4 tons or Approximately 3 cubic yards. Outer skin will be a minimum of 14 gauge. To maintain better heat dispersion the hopper will have a minimum of (1) 4" schedule 30 tube located near the top running horizontally. As the diesel burner heats up the hopper hot air is channeled through the pipe.

2.4 Insulation: The unit will be fully insulated on the top, sides, and bottom with a minimum of 2.0" FBX industrial and ceramic insulation in such a way as to provide proper heat retention.

2.5 Loading Doors: Insulated steel loading doors located on each side of the top of the machine. The handles used to open the doors, when not in use, must be retracted for safety.

2.6 Material Delivery: The unit shall be gravity fed and include a material delivery door located on the back. The door must be insulated and have a track to guide opening and closing. To ease fatigue a gear drive with operator wheel must

be included to operate door. A safety ratcheting lock must be included to prevent accidental closing of door. Doors without any type of operating assistance are not acceptable. An unloading tray will be provided to allow easy shoveling of material.

2.7 Heating Supply: One 12 volt 105,000 BTU diesel burner will fire into an angled ceramic lined combustable chamber. Hot air only, shall surround the entire material hopper eliminating any direct flame contact to the inner walls minimizing hot spots. The Burner chamber must be bolted to machine to allow for easy access for service and inspection of hopper. The burner will have a self-contained electronic spark igniter and proof of flame protection. To minimize downtime the burner must be self-priming and be equipped with a fuel pressure gauge.

2.8 Fuel System: The unit will include a 26 gallon Diesel fuel tank with a fuel gauge located within the frame rails for safety. A suction/strainer filter system will be included. The unit must be able to operate for a minimum of 16 hours one tank of fuel.

2.9 Temperature Control: The unit will be equipped with (1) one digital electronic controller to monitor mix temperature. Control must have intervals no greater than 1 degree F and continuously monitor temperature probe. Should a failure be detected, the controller will shut down the burner and flash an error code alerting the operator to the problem. A temperature probe will be installed near the rear of the hopper. The control system will be located at the rear of the machine and include a switch to select between trailer and overnight heating, temperature controller and volt meter. The control station will include a see through cover to allow viewing without having to open control box.

2.10 Overnight Heat System: The unit must also have the capability to maintain temperature overnight. A heavy duty marine grade 120VAC to 12VDC converter will be installed and wired into control system at control box and will operate the diesel burner to maintain air temperature. A protective cover will protect the converter from the elements. No batteries or engines will be required for overnight operations.

2.10A Tool Storage: Unit shall include a minimum of two (2) solvent boxes to be used to store shovels and other tools located at the front of the machine for easy access.

2.11 Unit Power: The unit will power directly off the tow vehicle 12DC accessory from the trailer plug. No engine or battery will be required. During

overnight heating, the Power Convertor will operate the diesel burner to maintain heat.

2.12 Paint: The unit shall be primed and painted black in color. It will be equipped with required safety decals and signage.

2.13 Warranty: The manufacture shall warranty the equipment for a period of one year.

2.14 Options:

Check if Required

☐ Surge Brakes in Lieu of Electric

☒ Tool Box

☒ 10lb Fire Extinguisher

☐ Single Strobe Light on Mast

☒ 2-5/16" Ball Hitch

☒ Slow Moving Sign

☐ Work Light

☒ LED Flashing Arrow Board

☒ Dual Strobe on Mast

☒ Spare Tire/Mount

☒ Plate Compactor

☐ 3" Pintle Hitch

☐ Spare 2.5" Pintle Hitch